

cants for therapeutic abortion. The yield of positive cultures will vary from 2 percent (in physicians' private offices) to 10 percent (in general clinics). The eradication of this great silent reservoir is one of the major hopes for curbing the epidemic of gonorrhea.

ERNEST W. PAGE, M.D.

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Hormonal Cytology in Office Practice

Hormonal cytology of the vagina is a reliable, inexpensive and simple semi-quantitative office procedure for evaluating normal and abnormal ovarian function. The response of the vaginal mucosa to the secretory activity of the ovary is well established. Estrogen uniquely stimulates full maturation of the stratified squamous epithelium of the vagina. The effect of progesterone is less specific but identifiable on serial vaginal smears.

The vaginal smear is best obtained from the lateral wall of the upper vagina. Smears obtained from cervical scrapings or the posterior pool of the vagina may be misleading. A routine Papanicolaou stain may be used. With a little experience, however, the physician may immediately examine the smear in his office by using one of several supravital stains (Rakoff's, Shaeffer's ink TMK 101, etc.).

Vaginal smears taken for hormonal effect must be interpreted with caution in the presence of vaginal infections, in routine Papanicolaou cervical scrapings, as a single isolated smear without knowledge of the menstrual cycle and in patients taking digitalis or steroidal hormones.

RONALD M. NELSON, M.D.

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Rubella Immunization of Adult Women: Current Status

Rubella vaccine, composed of live attenuated rubella virus, became licensed for use in the United States in June, 1969. Three vaccines are currently available for general use: Rubella Virus Vaccine, Philips Roxane Laboratories; Meruvax®, Merck Sharp & Dohme; and Cendevax®, Smith Kline & French Laboratories. Experimental trials with the vaccines, as well as clinical experience since their licensing, have indicated that there are significant differences between rubella infection, naturally acquired, and rubella immunization, vaccine-acquired. From a clinical standpoint, the important differences lie in 1) clinical manifestations, 2) communicability and 3) antibody levels and duration of immunity.

Transient joint reactions, manifested by arthritis and arthralgia, occur in 25 to 40 percent of vaccinated women, and appear to be milder with the Cendehill strain. These reactions are self-limited. Regarding communicability, most studies indicate that the vaccinated individual, although often shedding virus, is not contagious. Scott and Byrne demonstrated a lack of communicability of the vaccine virus when susceptible pregnant women were exposed. Finally, antibody levels after vaccination are significantly lower than those after natural rubella infection. Preliminary studies indicate that the persistence of antibody and duration of immunity are also less after vaccine-induced rubella than after naturally acquired (wild virus) infection.

In view of these observations, in obstetrical practice teen and adult women should be vaccinated individually: (1) blood test (H) for rubella antibody should be obtained, particularly as part of the premarital or prenatal examination; (2) the 10 to 13 percent of patients who do not show immunity should be vaccinated, with avoidance of pregnancy for two months; (3) if the patient is pregnant, vaccination should be carried out in the immediate post-partum period (with proscription of pregnancy for two months).

Until long-range rubella immunization responses are available, it must be appreciated